REPUBLIC CREOSOTING COMPANY

Mr. C. B. Edwards, - Indpls. TO:

OFFICE:

St. Louis Park, Minn.

FROM:

W. J. McLellan

DATE:

SUBJECT: ST. LOUIS PARK - DRAINAGE

US EPA RECORDS CENTER REGION 5

Please refer to Mr. Larkin's letter to you of June 3rd with reference to the State Board of Health's investigation of our drainage situation.

Mr. Kempe, the Engineer for this Department, spent some time here getting samples of our waste material and he handed us a preliminary report for our comments. We enclose copy herewith.

Mr. Kempe will await our comments before submitting anything to the State Board of Health and as his preliminary report is erroneous on so many points, it will have to be completely revised and, of course, we want the benefit of your advice and instructions before having a visit with Mr. Kempe.

Waste material going to our drainage ditch comes from the following sources:

- Water from benzol separating tanks
- Water from tar acid distillation
- Free water separating from storage tanks
- Sulphate water resulting from springing of carbolate
- Blow-off water from boilers at Creosoting Plant
- Surface drainage water resulting from rain and melting snow.

Regarding Mr. Kempe's preliminary report, you will realize that the State Board of Health have authority to investigate this situation with or without our consent so we had no choice but to go along with them and Er. Kempe agreed that his final report would be made only after receiving our comments. He insisted on taking his own samples, which in some cases at least, were incorrectly taken. We have the following comments on his preliminary report:

Page #1 Coal tar distillation

The water and benzol are stored in ground tanks having capacity of 13,000 gallons where it is allowed to settle for proper separation. When the water is separated the benzol is pumped out to storage and the water is pumped Our average operating schedule based on three still runs per week will produce approximately 4800 gallons of this water per month. The average production being 100 gallons per still, four stills being

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operated three times per week gives 1200 gallons per week or 4800 gallons per month.

Page #1 By-Products Department

1. The material referred to here is the emulsion formed in extracting tar acids from oil with caustic soda. There is very little of this emulsion which cannot be separated into carbolate and oil. The emulsion is placed in storage tanks where heating and settling over a period of time results in recovery of the oil and carbolate. Occasionally there is a layer between the carbolate and oil, which will not break up. This portion is set aside and used for weed killing around the plant and will amount to about 600 gallons per month. None of this material goes to the ditch.

Page #2 Next to the last paragraph

l. The figure suggested of 6000 gallons of waste material entering the ditch per week is too high. Our normal operating schedule will produce about 2000 gallons of sulphate water from tar acid springing and 1200 gallons from benzol tanks, which will bring the amount per week between 3000 and 4000 vallons. By normal operation we are referring to three one battery operation per week, which has been our schedule for some time.

2. Last paragraph

The tarry layer referred to is an accumulation on the bottom of the ditch since the plant was built twenty years ago.

Page #3 Paragraph #4 Sample No. 60494

The fact that this sample contained 25% settleable oil indicates that it was not representative of the material entering the ditch. Only the oil free water is pumped to the ditch and will contain only traces of oil. The only phenols and cresols present would be the amount soluble to produce a saturated solution, which as you know, would be one part in fifteen or 6.6% on phenols and one part in fifty or 2% on cresols. His analysis indicates that the sample was not representative. The fact that 35% tar acid was found shows that the analysis was made on the oil as the water could not contain this amount of tar acid.

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Since Mr. Kempe gave us this report we took samples each day from the drainage water as it leaves our property for one week and are sending you one quart of this accumulated sample. We are also sending a sample of the bottom of the ditch at the edge of our property.

Our analysis of this water sample-necessarily superficial because of our limited equipment-shows the

specific gravity at 1.004 at 60°F.

Total solids by evaporation

- two tenths of one percent

phenols trace (Our Chapin equipment will not calibrate the amount of phenols present but definitely indicates a presence of some phenols)

sodium sulphate trace

The sample of heavy material taken from the bottom of the ditch shows the presence of tarry material. It extends from three to four inches into the bed of the ditch.

As you know, our plant operation effecting the ditch water varies a great deal. During the week the sample was taken, we were manufacturing tar acid and carbolates were sprung each day.

There has been considerable correspondence on this subject over the past ten or fifteen years but this is the first time that the State Board of Health have become involved and, of course, we want to be sure that Mr. Kempe's final report will be based on facts and if at all possible avoid any controversy with the State Board of Health.

In 1929 we gave some consideration to installing settling basins similar to those at Mobile and Maywood. This system would remove free materials but would not remove any materials soluble in water.

Will you please write us as promptly as you can giving us your comments?

Yours erry truly,

WJM:LR Enc.

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